The Optical Gravitational Lensing Experiment. Multiple Cluster Candidates in the Large Magellanic Cloud*

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ABSTRACT

We present 100 multiple cluster candidates selected from the OGLE catalog of star clusters in the Large Magellanic Cloud. Statistical analysis shows that the significant fraction of these objects may constitute physical systems. Coeval ages of 102 components of multiple objects suggest their common origin. 53 components have very different ages. The comparison of the population of multiple clusters candidates from the SMC and the LMC shows that: a) distributions of sizes and ages of multiple and single clusters from the Magellanic Clouds are very similar, b) the difference of sizes of components of a given system is small, c) in both distributions of separation of multiple clusters from the LMC and SMC two peaks are seen at about 9 pc and 15 pc, d) both age distributions reveal peaks around 100 Myr, which may be connected with the last encounter of the LMC and the SMC.

1 Introduction

Previous searches revealed that the Magellanic Clouds possess numerous multiple cluster candidates. Bhatia and Hatzidimitriou (1988) and Bhatia *et al.* (1991) constructed the catalog of cluster pairs from the LMC. Binary clusters from the SMC were described by Hatzidimitriou and Bhatia (1990). Recently, based on the OGLE catalog of star clusters from the SMC (Pietrzyński *et al.* 1998), the list of multiple star cluster candidates from the central parts of this galaxy was presented by Pietrzyński and Udalski (1999a). Simple statistical considerations show that the number of multiple cluster candidates is significantly larger than the number expected from the chance line-up due to projection. In the case of selected cluster systems from the LMC their physical connections were confirmed based on detailed studies (Kontizas *et al.* 1993, Vallenari *et al.* 1998, Leon *et al.* 1998, Dieball and Grebel 2000 and references therein).

Having important implications on the processes of formation and evolution of clusters, the multiple star clusters were also subject of several theoretical investigations. Fujimoto and Kumai (1997) pointed out that the binary clusters

*Based on observations obtained with the 1.3 m Warsaw telescope at the Las Campanas Observatory of the Carnegie Institution of Washington.

could be formed by the oblique collisions between massive gas clouds. This scenario led to systems of clusters with very similar ages. Another scenario of tidal capture in groups of clusters was proposed by Leon *et al.* (1999). Such a mechanism explains formation of systems with members having large age difference.

The Optical Gravitational Lensing Experiment (OGLE) (Udalski, Kubiak and Szymański 1997) provided in precise BVI observations of millions of stars from the Magellanic Clouds (Udalski *et al.* 1998). The OGLE data, covering relatively large areas in the Clouds are very well suited for searching and analyzing the properties of star clusters from these galaxies. In a series of papers we present results of these investigations. Catalogs of clusters from the LMC and the SMC were presented by Pietrzyński *et al.* (1999) and Pietrzyński *et al.* (1998), respectively. Ages for about 700 of these clusters were determined using the standard procedure of isochrone fitting (Pietrzyński and Udalski 1999b, 2000). Possible multiple clusters from the SMC were listed by Pietrzyński and Udalski (1999c). The lists of eclipsing systems and Cepheids in coincidence with star clusters in Magellanic Clouds are given in Pietrzyński and Udalski (1999 ad).

In this contribution we present multiple cluster candidates selected from the catalog of star clusters in central parts of the Large Magellanic Cloud and compare them with the objects from the OGLE catalog of multiple clusters from the SMC (Pietrzyński and Udalski 1999c).

2 LMC Multiple Cluster Candidates

Following the previous catalogs, clusters with projected separations smaller than 18 pc, assuming the distance modulus to the LMC of 18.24 mag (Udalski 2000), were selected from the OGLE catalog of clusters from the 5.8 square degrees region in the LMC (Pietrzyński *et al.* 1999). Among 745 star clusters we detected 73, 18, 5, 1 and 3 systems consisting of 2, 3, 4, 5 and 6 clusters, respectively. Table 1 contains their description. Cluster designations, equatorial coordinates and radii were taken from the catalog of clusters (Pietrzyński *et al.* 1999). Ages were taken from Pietrzyński and Udalski (2000).

The number of cluster pairs expected from chance line-up due to projection may be calculated from the following formula given by Page (1972).

$$N_1 = 0.5\pi \times N_2^2 \times s^2$$

where N_1, N_2 and s are the expected number of pairs per square degree, the number of clusters per square degree and projected angular separation in degrees, respectively. Under assumption that 745 clusters from the OGLE catalog are distributed uniformly in the 5.8 square degrees region of the LMC we find that the number of chance pairs with the separations smaller than 18 pc should be 51. Almost the same result, namely 53, was obtained adopting this formula

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The multiple cluster candidates from the LMC

Name OGLE-CL-	α_{2000}	δ_{2000}	Radius ["]	$\log t$	$\sigma_{\log t}$
LMC0011	$5^h01^m17^s.72$	$-67°18'06''.7$	21	–	–
LMC0012	$5^h01^m22^s.46$	$-67°17'41''.2$	20	8.7	0.1
LMC0014	$5^h01^m26^s.82$	$-67°17'42''.6$	12	–	–
LMC0043	$5^h03^m38^s.64$	$-68°58'44''.3$	13	8.5	0.05
LMC0044	$5^h03^m42^s.13$	$-68°58'06''.3$	14	7.7	0.1
LMC0048	$5^h03^m49^s.94$	$-68°58'37''.5$	10	–	–
LMC0053	$5^h04^m19^s.30$	$-69°21'23''.2$	10	8.8	0.1
LMC0057	$5^h04^m24^s.94$	$-69°20'59''.7$	13	8.85	0.05
LMC0059	$5^h04^m30^s.57$	$-69°21'18''.3$	20	8.8	0.1
LMC0061	$5^h04^m39^s.09$	$-69°20'26''.1$	25	8.4	0.1
LMC0063	$5^h04^m44^s.89$	$-68°59'03''.8$	19	8.4	0.1
LMC0064	$5^h04^m50^s.43$	$-68°59'16''.2$	20	8.4	0.05
LMC0066	$5^h05^m00^s.64$	$-68°45'01''.3$	14	8.0	0.05
LMC0075	$5^h05^m14^s.14$	$-68°44'34''.4$	18	7.9	0.05
LMC0077	$5^h05^m18^s.53$	$-68°43'33''.7$	19	7.9	0.1
LMC0078	$5^h05^m19^s.18$	$-68°44'14''.7$	30	8.0	0.1
LMC0081	$5^h05^m35^s.79$	$-68°37'42''.5$	35	8.5	0.05
LMC0083	$5^h05^m40^s.09$	$-68°38'11''.9$	25	7.8	0.05
LMC0089	$5^h05^m55^s.36$	$-68°57'04''.8$	17	8.0	0.1
LMC0092	$5^h06^m02^s.27$	$-68°57'22''.2$	14	7.2	0.2
LMC0090	$5^h05^m55^s.63$	$-68°37'42''.8$	27	7.8	0.1
LMC0093	$5^h06^m02^s.89$	$-68°37'41''.6$	25	8.0	0.05
LMC0103	$5^h06^m24^s.14$	$-69°34'06''.1$	23	8.7	0.1
LMC0108	$5^h06^m33^s.66$	$-69°34'05''.4$	18	–	–
LMC0105	$5^h06^m24^s.81$	$-68°22'29''.5$	20	8.35	0.1
LMC0107	$5^h06^m33^s.57$	$-68°21'47''.3$	19	7.3	0.05
LMC0133	$5^h07^m55^s.46$	$-69°17'57''.3$	11	8.3	0.1
LMC0135	$5^h08^m03^s.87$	$-69°18'03''.7$	10	–	–
LMC0140	$5^h08^m34^s.99$	$-69°10'36''.1$	20	8.85	0.05
LMC0141	$5^h08^m43^s.59$	$-69°10'58''.6$	18	7.7,8.2	0.1
LMC0142	$5^h08^m45^s.79$	$-68°45'38''.6$	63	7.9	0.05
LMC0145	$5^h08^m54^s.55$	$-68°45'13''.9$	29	8.0	0.1
LMC0149	$5^h09^m12^s.95$	$-69°17'00''.0$	11	9.05	0.05
LMC0151	$5^h09^m14^s.13$	$-69°16'00''.9$	7	–	–
LMC0154	$5^h09^m20^s.10$	$-68°50'52''.8$	43	7.85	0.05
LMC0155	$5^h09^m24^s.99$	$-68°51'47''.4$	25	7.6	0.05
LMC0156	$5^h09^m28^s.43$	$-68°51'01''.5$	21	7.8	0.05
LMC0160	$5^h09^m42^s.92$	$-68°48'06''.5$	18	8.2	0.1
LMC0161	$5^h09^m45^s.66$	$-68°47'18''.1$	22	8.3	0.1
LMC0169	$5^h10^m07^s.06$	$-69°05'15''.2$	16	–	–
LMC0170	$5^h10^m11^s.15$	$-69°05'15''.0$	12	8.0	0.1
LMC0173	$5^h10^m18^s.54$	$-69°04'46''.5$	10	7.7	0.1

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Name OGLE-CL-	α_{2000}	δ_{2000}	Radius [″]	$\log t$	$\sigma_{\log t}$
LMC0175	$5^h10^m19^s.85$	$-69°31'23''.9$	11	–	–
LMC0181	$5^h10^m30^s.90$	$-69°30'59''.8$	16	–	–
LMC0176	$5^h10^m20^s.23$	$-68°52'37''.6$	19	8.3	0.1
LMC0179	$5^h10^m29^s.73$	$-68°52'21''.5$	21	8.35	0.1
LMC0177	$5^h10^m22^s.56$	$-68°55'41''.8$	34	8.2	0.05
LMC0180	$5^h10^m30^s.90$	$-68°56'03''.1$	27	8.0	0.2
LMC0209	$5^h12^m00^s.99$	$-69°12'04''.4$	39	8.2	0.1
LMC0211	$5^h12^m03^s.79$	$-69°12'53''.5$	26	8.2	0.05
LMC0210	$5^h12^m03^s.06$	$-69°17'11''.8$	18	7.9	0.1
LMC0212	$5^h12^m08^s.79$	$-69°16'44''.5$	20	7.9	0.1
LMC0218	$5^h12^m17^s.18$	$-69°17'31''.9$	13	9.1	0.1
LMC0219	$5^h12^m18^s.11$	$-69°17'02''.9$	19	8.0	0.05
LMC0213	$5^h12^m09^s.46$	$-68°54'44''.3$	12	8.9	0.05
LMC0215	$5^h12^m14^s.91$	$-68°55'52''.1$	18	8.2	0.08
LMC0214	$5^h12^m13^s.20$	$-68°57'04''.5$	18	8.4	0.1
LMC0216	$5^h12^m14^s.92$	$-69°25'03''.6$	23	8.9	0.1
LMC0220	$5^h12^m21^s.16$	$-69°24'41''.3$	14	8.05	0.05
LMC0226	$5^h12^m34^s.43$	$-69°17'13''.7$	16	7.6	0.08
LMC0227	$5^h12^m38^s.05$	$-69°17'33''.0$	14	7.9	0.1
LMC0232	$5^h12^m57^s.60$	$-69°04'05''.7$	12	8.25	0.05
LMC0233	$5^h13^m03^s.60$	$-69°02'59''.6$	16	9.05	0.05
LMC0237	$5^h13^m13^s.22$	$-69°22'30''.3$	18	<6.7	–
LMC0238	$5^h13^m19^s.04$	$-69°21'44''.5$	32	<6.7	–
LMC0240	$5^h13^m21^s.75$	$-69°22'37''.9$	27	7.0	0.1
LMC0242	$5^h13^m28^s.42$	$-69°22'21''.7$	23	<6.7	–
LMC0246	$5^h13^m38^s.90$	$-69°23'02''.0$	18	<6.8	–
LMC0247	$5^h13^m40^s.08$	$-69°22'26''.8$	11	7.8	0.1
LMC0266	$5^h15^m27^s.32$	$-69°20'43''.0$	18	8.0	0.1
LMC0274	$5^h15^m40^s.46$	$-69°20'18''.2$	13	7.95	0.05
LMC0267	$5^h15^m33^s.35$	$-69°31'56''.5$	9	–	–
LMC0275	$5^h15^m44^s.20$	$-69°32'25''.8$	14	–	–
LMC0279	$5^h15^m54^s.81$	$-69°32'14''.2$	13	–	–
LMC0270	$5^h15^m37^s.18$	$-69°28'24''.5$	25	6.7	0.1
LMC0278	$5^h15^m52^s.01$	$-69°28'08''.2$	31	7.85	0.05
LMC0280	$5^h15^m56^s.96$	$-69°27'16''.4$	19	–	–
LMC0294	$5^h16^m48^s.94$	$-69°34'50''.0$	16	–	–
LMC0301	$5^h16^m54^s.05$	$-69°34'56''.3$	14	8.2	0.1
LMC0296	$5^h16^m50^s.15$	$-69°03'35''.0$	11	–	–
LMC0297	$5^h16^m52^s.07$	$-69°04'13''.4$	7	–	–
LMC0298	$5^h16^m52^s.88$	$-69°09'00''.0$	12	7.3	0.2
LMC0303	$5^h16^m55^s.59$	$-69°08'51''.2$	30	6.7	0.1

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Name OGLE-CL-	α_{2000}	δ_{2000}	Radius [″]	$\log t$	$\sigma_{\log t}$
LMC0302	$5^h16^m54^s.41$	$-68°52'35''.8$	20	8.65	0.05
LMC0304	$5^h17^m08^s.00$	$-68°52'23''.5$	41	9.0	0.1
LMC0309	$5^h17^m22^s.39$	$-69°20'16''.2$	49	7.88	0.03
LMC0311	$5^h17^m26^s.59$	$-69°22'31''.8$	45	9.0	0.08
LMC0312	$5^h17^m27^s.68$	$-69°21'22''.3$	31	8.0	0.05
LMC0316	$5^h17^m43^s.83$	$-69°34'06''.1$	22	6.8	0.2
LMC0317	$5^h17^m45^s.94$	$-69°34'24''.4$	16	–	–
LMC0321	$5^h17^m56^s.16$	$-69°34'52''.3$	17	8.1	0.07
LMC0324	$5^h18^m06^s.44$	$-69°31'46''.4$	29	7.4	0.1
LMC0326	$5^h18^m10^s.51$	$-69°32'26''.8$	14	8.0	0.1
LMC0330	$5^h18^m18^s.74$	$-69°32'14''.8$	41	7.38	0.03
LMC0329	$5^h18^m18^s.05$	$-69°45'04''.9$	18	8.0	0.1
LMC0334	$5^h18^m31^s.19$	$-69°45'14''.6$	24	7.95	0.08
LMC0338	$5^h18^m42^s.53$	$-69°14'12''.3$	46	6.7	0.1
LMC0340	$5^h18^m46^s.72$	$-69°13'32''.4$	19	<6.8	–
LMC0351	$5^h19^m25^s.74$	$-69°32'27''.1$	33	8.3	0.05
LMC0353	$5^h19^m33^s.88$	$-69°32'31''.9$	26	8.8	0.1
LMC0359	$5^h19^m57^s.48$	$-69°25'02''.8$	18	8.0	0.1
LMC0362	$5^h20^m03^s.01$	$-69°23'59''.1$	11	9	0.05
LMC0361	$5^h20^m02^s.05$	$-69°15'39''.6$	10	8.0	0.1
LMC0363	$5^h20^m04^s.43$	$-69°15'54''.6$	9	–	–
LMC0365	$5^h20^m08^s.04$	$-70°09'15''.0$	10	8.3	0.1
LMC0366	$5^h20^m08^s.08$	$-70°08'34''.0$	10	–	–
LMC0367	$5^h20^m15^s.93$	$-69°20'24''.8$	14	8.0	0.1
LMC0370	$5^h20^m25^s.45$	$-69°21'18''.1$	20	7.8	0.1
LMC0372	$5^h20^m27^s.62$	$-69°21'53''.3$	20	8.55	0.1
LMC0369	$5^h20^m23^s.57$	$-69°35'03''.1$	28	8.3	0.07
LMC0371	$5^h20^m25^s.83$	$-69°34'12''.7$	26	–	–
LMC0375	$5^h20^m30^s.61$	$-69°32'09''.0$	31	7.7	0.05
LMC0379	$5^h20^m35^s.42$	$-69°31'32''.9$	27	8.0	0.1
LMC0382	$5^h20^m57^s.73$	$-69°28'40''.2$	31	9.03	0.05
LMC0383	$5^h20^m59^s.72$	$-69°29'44''.8$	11	–	–
LMC0389	$5^h21^m10^s.93$	$-69°56'36''.8$	16	8.7	0.08
LMC0394	$5^h21^m24^s.45$	$-69°56'27''.5$	25	8.55	0.05
LMC0395	$5^h21^m26^s.82$	$-69°56'59''.0$	30	9.0	0.1
LMC0390	$5^h21^m18^s.65$	$-69°28'35''.7$	17	9.0	0.08
LMC0393	$5^h21^m23^s.54$	$-69°29'26''.6$	18	–	–
LMC0404	$5^h22^m03^s.30$	$-69°15'17''.9$	24	8.35	0.05
LMC0405	$5^h22^m06^s.85$	$-69°14'44''.7$	14	8.3	0.1
LMC0407	$5^h22^m14^s.67$	$-69°30'40''.7$	40	8.2	0.1
LMC0408	$5^h22^m26^s.26$	$-69°29'53''.5$	35	–	–

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Name OGLE-CL-	α_{2000}	δ_{2000}	Radius [″]	$\log t$	$\sigma_{\log t}$
LMC0409	$5^h22^m27^s.28$	$-69°44'43''.0$	24	7.55	0.05
LMC0413	$5^h22^m37^s.90$	$-69°44'39''.9$	22	8.75	0.05
LMC0417	$5^h23^m12^s.94$	$-69°49'23''.0$	22	8.3	0.1
LMC0418	$5^h23^m19^s.32$	$-69°49'46''.5$	16	–	–
LMC0419	$5^h23^m25^s.24$	$-69°50'07''.1$	26	7.98	0.05
LMC0425	$5^h23^m36^s.75$	$-69°49'18''.7$	30	–	–
LMC0422	$5^h23^m32^s.17$	$-69°54'14''.0$	11	8.2	0.1
LMC0424	$5^h23^m35^s.48$	$-69°54'17''.7$	10	8.0	0.1
LMC0430	$5^h24^m16^s.37$	$-69°39'12''.9$	12	8.8	0.05
LMC0433	$5^h24^m21^s.58$	$-69°38'28''.9$	11	9.0	0.1
LMC0431	$5^h24^m20^s.42$	$-69°46'26''.4$	19	8.0	0.05
LMC0434	$5^h24^m23^s.94$	$-69°46'47''.5$	10	9.0	0.1
LMC0436	$5^h24^m33^s.04$	$-69°54'04''.3$	44	8.7	0.08
LMC0437	$5^h24^m33^s.45$	$-69°55'26''.9$	14	8.7	0.1
LMC0440	$5^h24^m41^s.59$	$-69°53'10''.8$	21	8.1	0.08
LMC0441	$5^h24^m52^s.46$	$-69°50'36''.7$	11	–	–
LMC0442	$5^h24^m53^s.02$	$-69°49'47''.2$	29	8.1	0.1
LMC0443	$5^h24^m55^s.33$	$-69°50'13''.9$	22	8.0	0.03
LMC0444	$5^h24^m55^s.46$	$-69°51'46''.0$	14	8.0	0.08
LMC0447	$5^h25^m03^s.54$	$-69°52'12''.7$	12	8.1	0.1
LMC0449	$5^h25^m05^s.90$	$-69°52'27''.2$	36	–	–
LMC0445	$5^h24^m56^s.68$	$-69°25'29''.3$	18	8.6	0.1
LMC0446	$5^h25^m01^s.13$	$-69°26'03''.1$	35	8.3	0.05
LMC0448	$5^h25^m04^s.69$	$-69°44'14''.3$	20	8.6	0.1
LMC0450	$5^h25^m06^s.87$	$-69°42'56''.3$	20	8.2	0.1
LMC0454	$5^h25^m23^s.00$	$-69°47'07''.0$	16	8.6,9.0	0.05
LMC0456	$5^h25^m28^s.00$	$-69°46'31''.6$	21	8.45	0.05
LMC0457	$5^h25^m30^s.72$	$-69°50'09''.6$	37	8.0	0.1
LMC0461	$5^h25^m38^s.49$	$-69°49'30''.8$	30	7.95	0.05
LMC0465	$5^h25^m53^s.77$	$-69°46'13''.5$	20	8.8	0.05
LMC0467	$5^h25^m57^s.30$	$-69°45'03''.9$	22	8.3	0.05
LMC0475	$5^h26^m30^s.13$	$-69°47'26''.0$	12	–	–
LMC0476	$5^h26^m33^s.08$	$-69°48'12''.0$	23	8.4	0.1
LMC0477	$5^h26^m34^s.11$	$-69°50'26''.7$	37	7.8	0.05
LMC0478	$5^h26^m35^s.30$	$-69°49'23''.1$	30	8.0	0.1
LMC0480	$5^h26^m45^s.58$	$-69°51'03''.2$	31	8.0	0.05
LMC0481	$5^h26^m48^s.80$	$-69°50'17''.2$	29	7.8	0.1
LMC0482	$5^h26^m52^s.66$	$-69°46'03''.0$	22	8.9	9.0
LMC0485	$5^h27^m00^s.68$	$-69°46'37''.5$	25	7.95	0.05
LMC0495	$5^h27^m35^s.63$	$-69°53'49''.6$	19	8.6	0.2
LMC0497	$5^h27^m47^s.58$	$-69°53'29''.8$	24	8.1	0.05

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continued

Name OGLE-CL-	α_{2000}	δ_{2000}	Radius [″]	$\log t$	$\sigma_{\log t}$
LMC0500	$5^h28^m05\overset{s}{.}10$	$-69°59'16\overset{''}{.}7$	12	8.2	0.1
LMC0501	$5^h28^m06\overset{s}{.}85$	$-70°00'08\overset{''}{.}7$	12	–	–
LMC0504	$5^h28^m25\overset{s}{.}20$	$-69°57'12\overset{''}{.}0$	25	7.65	0.05
LMC0510	$5^h28^m41\overset{s}{.}10$	$-69°57'13\overset{''}{.}0$	20	8.0	0.05
LMC0505	$5^h28^m26\overset{s}{.}78$	$-69°46'05\overset{''}{.}3$	15	8.4	0.05
LMC0511	$5^h28^m42\overset{s}{.}33$	$-69°46'06\overset{''}{.}4$	31	9.0	0.1
LMC0507	$5^h28^m31\overset{s}{.}72$	$-69°50'32\overset{''}{.}1$	16	8.7	0.1
LMC0509	$5^h28^m40\overset{s}{.}97$	$-69°49'51\overset{''}{.}0$	12	–	–
LMC0512	$5^h28^m44\overset{s}{.}44$	$-69°50'04\overset{''}{.}9$	19	8.1	0.05
LMC0517	$5^h29^m18\overset{s}{.}80$	$-69°54'52\overset{''}{.}5$	16	8.2	0.15
LMC0520	$5^h29^m24\overset{s}{.}59$	$-69°55'11\overset{''}{.}8$	18	8.2	0.05
LMC0521	$5^h29^m27\overset{s}{.}00$	$-69°47'06\overset{''}{.}4$	11	–	–
LMC0525	$5^h29^m34\overset{s}{.}59$	$-69°46'32\overset{''}{.}8$	20	8.1	0.1
LMC0529	$5^h29^m59\overset{s}{.}77$	$-70°03'41\overset{''}{.}6$	12	–	–
LMC0539	$5^h30^m11\overset{s}{.}38$	$-70°04'09\overset{''}{.}7$	14	–	–
LMC0530	$5^h29^m59\overset{s}{.}95$	$-69°31'21\overset{''}{.}3$	12	9.0	0.1
LMC0531	$5^h30^m00\overset{s}{.}73$	$-69°31'37\overset{''}{.}1$	14	9.1	0.05
LMC0532	$5^h30^m01\overset{s}{.}73$	$-69°57'02\overset{''}{.}3$	16	8.3	0.05
LMC0533	$5^h30^m01\overset{s}{.}93$	$-69°56'38\overset{''}{.}2$	16	–	–
LMC0537	$5^h30^m04\overset{s}{.}37$	$-69°44'27\overset{''}{.}4$	11	–	–
LMC0538	$5^h30^m10\overset{s}{.}37$	$-69°45'09\overset{''}{.}6$	57	>9.2	–
LMC0542	$5^h30^m34\overset{s}{.}20$	$-70°11'51\overset{''}{.}4$	20	–	–
LMC0545	$5^h30^m39\overset{s}{.}55$	$-70°13'06\overset{''}{.}9$	11	8.9	0.1
LMC0546	$5^h30^m40\overset{s}{.}70$	$-70°13'21\overset{''}{.}2$	14	8.9	0.05
LMC0555	$5^h31^m19\overset{s}{.}49$	$-70°01'59\overset{''}{.}6$	13	–	–
LMC0558	$5^h31^m30\overset{s}{.}77$	$-70°01'24\overset{''}{.}5$	18	8.8	0.1
LMC0562	$5^h31^m45\overset{s}{.}78$	$-70°18'27\overset{''}{.}0$	11	–	–
LMC0564	$5^h31^m50\overset{s}{.}36$	$-70°17'21\overset{''}{.}5$	20	8.4	0.1
LMC0565	$5^h31^m56\overset{s}{.}48$	$-70°09'32\overset{''}{.}5$	49	>9.2	–
LMC0566	$5^h32^m01\overset{s}{.}06$	$-70°10'42\overset{''}{.}6$	21	8.2	0.1
LMC0572	$5^h32^m42\overset{s}{.}62$	$-69°53'10\overset{''}{.}8$	27	–	–
LMC0574	$5^h32^m46\overset{s}{.}01$	$-69°52'04\overset{''}{.}6$	14	8.3	0.1
LMC0573	$5^h32^m45\overset{s}{.}92$	$-70°26'03\overset{''}{.}4$	11	–	–
LMC0576	$5^h32^m48\overset{s}{.}76$	$-70°26'07\overset{''}{.}4$	10	>8.9	–
LMC0577	$5^h32^m48\overset{s}{.}86$	$-70°27'23\overset{''}{.}0$	25	8.2	0.05
LMC0578	$5^h32^m51\overset{s}{.}25$	$-70°26'01\overset{''}{.}5$	14	8.65	0.05
LMC0598	$5^h34^m00\overset{s}{.}48$	$-69°40'21\overset{''}{.}8$	30	8.5	0.1
LMC0601	$5^h34^m14\overset{s}{.}51$	$-69°40'34\overset{''}{.}1$	8	–	–
LMC0605	$5^h34^m40\overset{s}{.}36$	$-69°44'50\overset{''}{.}1$	24	6.7	0.05
LMC0608	$5^h34^m46\overset{s}{.}65$	$-69°44'35\overset{''}{.}2$	23	8.05	0.05

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Name OGLE-CL-	α_{2000}	δ_{2000}	Radius [″]	$\log t$	$\sigma_{\log t}$
LMC0616	$5^h35^m14\overset{s}{.}02$	$-69°54'21\overset{''}{.}2$	24	6.9	0.2
LMC0617	$5^h35^m17\overset{s}{.}10$	$-69°54'50\overset{''}{.}3$	20	–	–
LMC0619	$5^h35^m30\overset{s}{.}68$	$-70°20'56\overset{''}{.}9$	14	–	–
LMC0621	$5^h35^m36\overset{s}{.}65$	$-70°22'11\overset{''}{.}2$	14	–	–
LMC0622	$5^h35^m38\overset{s}{.}66$	$-70°14'23\overset{''}{.}1$	30	–	–
LMC0625	$5^h35^m51\overset{s}{.}58$	$-70°13'51\overset{''}{.}2$	10	–	–
LMC0638	$5^h37^m15\overset{s}{.}39$	$-69°53'44\overset{''}{.}7$	18	–	–
LMC0640	$5^h37^m21\overset{s}{.}73$	$-69°53'40\overset{''}{.}5$	13	–	–
LMC0641	$5^h37^m22\overset{s}{.}08$	$-69°58'21\overset{''}{.}2$	34	–	–
LMC0642	$5^h37^m22\overset{s}{.}24$	$-69°58'56\overset{''}{.}0$	10	–	–
LMC0644	$5^h37^m25\overset{s}{.}84$	$-70°13'28\overset{''}{.}6$	16	–	–
LMC0648	$5^h37^m37\overset{s}{.}81$	$-70°13'56\overset{''}{.}4$	59	–	–
LMC0647	$5^h37^m37\overset{s}{.}00$	$-70°07'33\overset{''}{.}5$	24	–	–
LMC0650	$5^h37^m39\overset{s}{.}15$	$-70°08'43\overset{''}{.}9$	37	–	–
LMC0651	$5^h37^m42\overset{s}{.}36$	$-70°09'54\overset{''}{.}0$	27	8.1	0.05
LMC0663	$5^h38^m57\overset{s}{.}52$	$-69°59'31\overset{''}{.}5$	14	–	–
LMC0664	$5^h39^m00\overset{s}{.}27$	$-69°59'19\overset{''}{.}5$	22	8.35	0.08
LMC0665	$5^h39^m05\overset{s}{.}63$	$-70°13'46\overset{''}{.}9$	18	8.85	0.1
LMC0666	$5^h39^m17\overset{s}{.}87$	$-70°13'11\overset{''}{.}9$	20	–	–
LMC0667	$5^h39^m27\overset{s}{.}91$	$-70°12'35\overset{''}{.}6$	9	–	–
LMC0669	$5^h39^m32\overset{s}{.}97$	$-69°53'31\overset{''}{.}1$	10	–	–
LMC0670	$5^h39^m36\overset{s}{.}01$	$-69°54'28\overset{''}{.}2$	11	8.8	0.1
LMC0679	$5^h40^m56\overset{s}{.}60$	$-70°51'27\overset{''}{.}7$	18	9.0	0.1
LMC0680	$5^h41^m01\overset{s}{.}85$	$-70°50'50\overset{''}{.}2$	14	8.3	0.1
LMC0686	$5^h41^m29\overset{s}{.}28$	$-70°13'58\overset{''}{.}0$	14	8.0	0.1
LMC0687	$5^h41^m33\overset{s}{.}03$	$-70°14'08\overset{''}{.}0$	11	–	–
LMC0704	$5^h43^m41\overset{s}{.}52$	$-70°36'30\overset{''}{.}3$	23	9.0	0.05
LMC0708	$5^h43^m55\overset{s}{.}64$	$-70°36'37\overset{''}{.}6$	11	9.0	0.1
LMC0711	$5^h44^m14\overset{s}{.}10$	$-70°39'19\overset{''}{.}8$	16	8.3	0.1
LMC0712	$5^h44^m14\overset{s}{.}50$	$-70°40'09\overset{''}{.}5$	20	8.3	0.1
LMC0713	$5^h44^m16\overset{s}{.}72$	$-70°59'59\overset{''}{.}1$	13	–	–
LMC0715	$5^h44^m33\overset{s}{.}07$	$-70°59'35\overset{''}{.}3$	32	8.2	0.05
LMC0718	$5^h44^m44\overset{s}{.}66$	$-71°00'21\overset{''}{.}3$	8	8.4	0.1
LMC0717	$5^h44^m42\overset{s}{.}33$	$-70°25'31\overset{''}{.}0$	13	–	–
LMC0720	$5^h44^m47\overset{s}{.}26$	$-70°24'21\overset{''}{.}9$	11	8.2	0.2
LMC0731	$5^h45^m46\overset{s}{.}36$	$-70°43'09\overset{''}{.}0$	16	8.7	0.1
LMC0732	$5^h45^m59\overset{s}{.}18$	$-70°43'45\overset{''}{.}8$	9	7.8	0.2
LMC0732	$5^h45^m59\overset{s}{.}18$	$-70°43'45\overset{''}{.}8$	9	7.8	0.2
LMC0733	$5^h46^m11\overset{s}{.}08$	$-70°43'12\overset{''}{.}2$	10	–	–
LMC0736	$5^h46^m41\overset{s}{.}10$	$-70°50'51\overset{''}{.}8$	11	8.25	0.08
LMC0737	$5^h46^m47\overset{s}{.}18$	$-70°49'58\overset{''}{.}5$	15	8.35	0.05